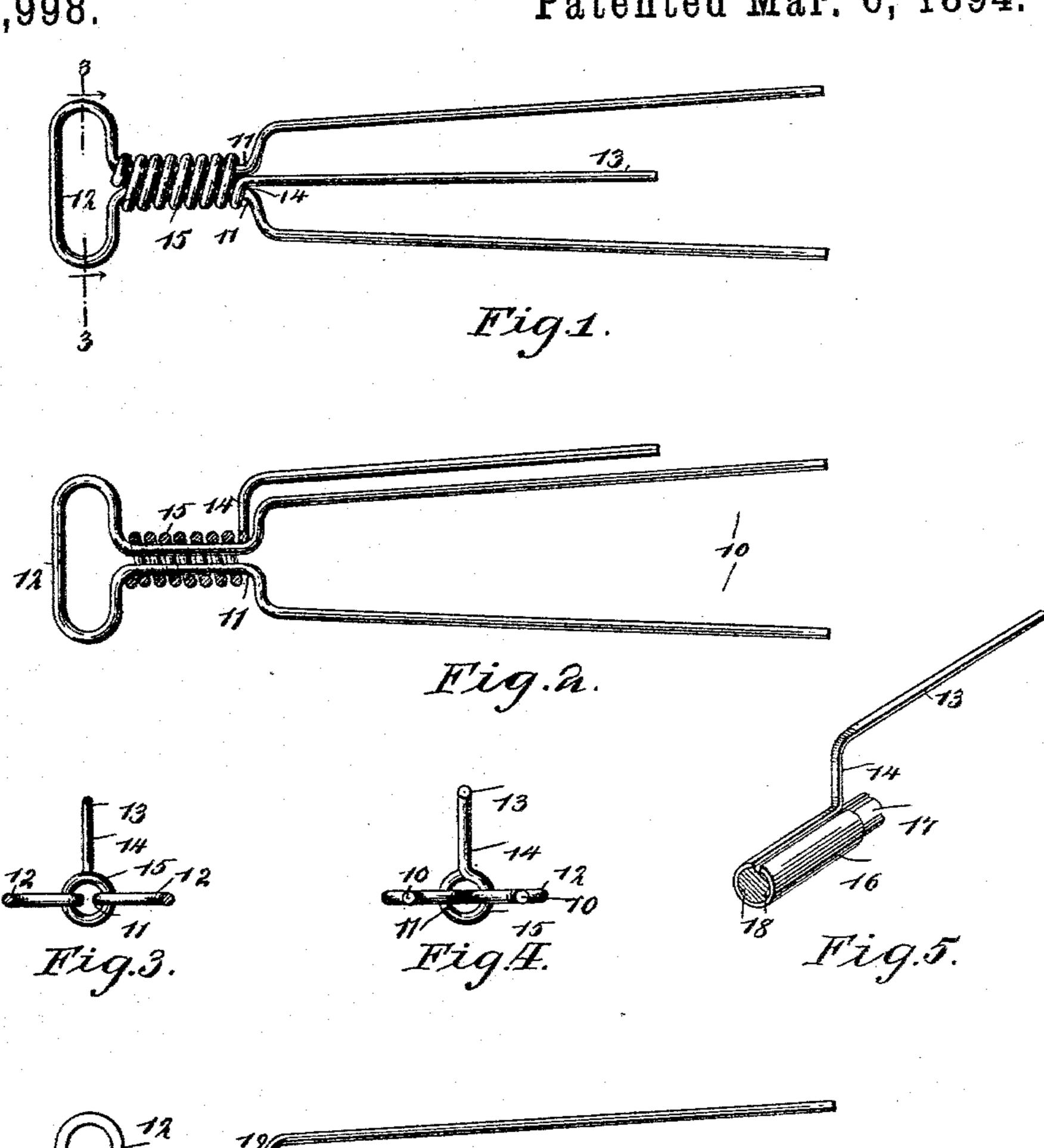
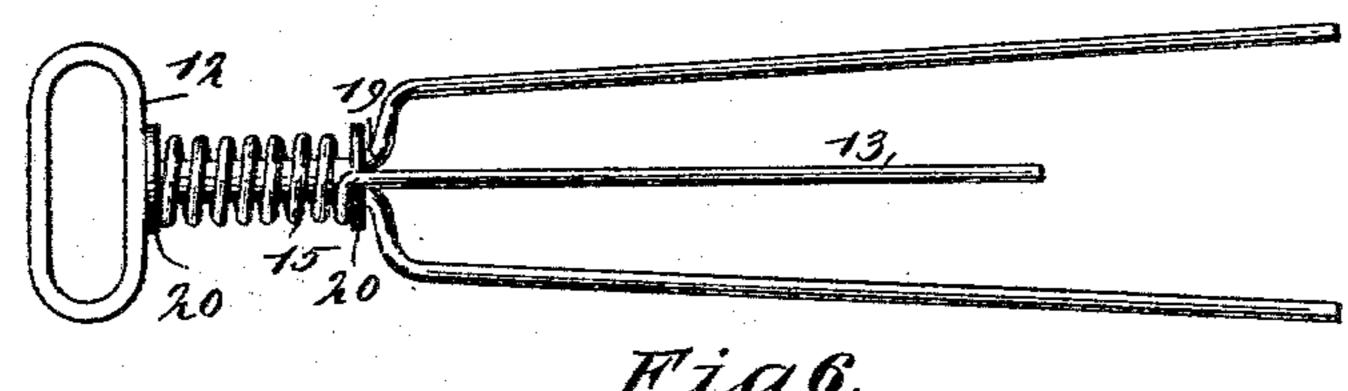
(No Model.)

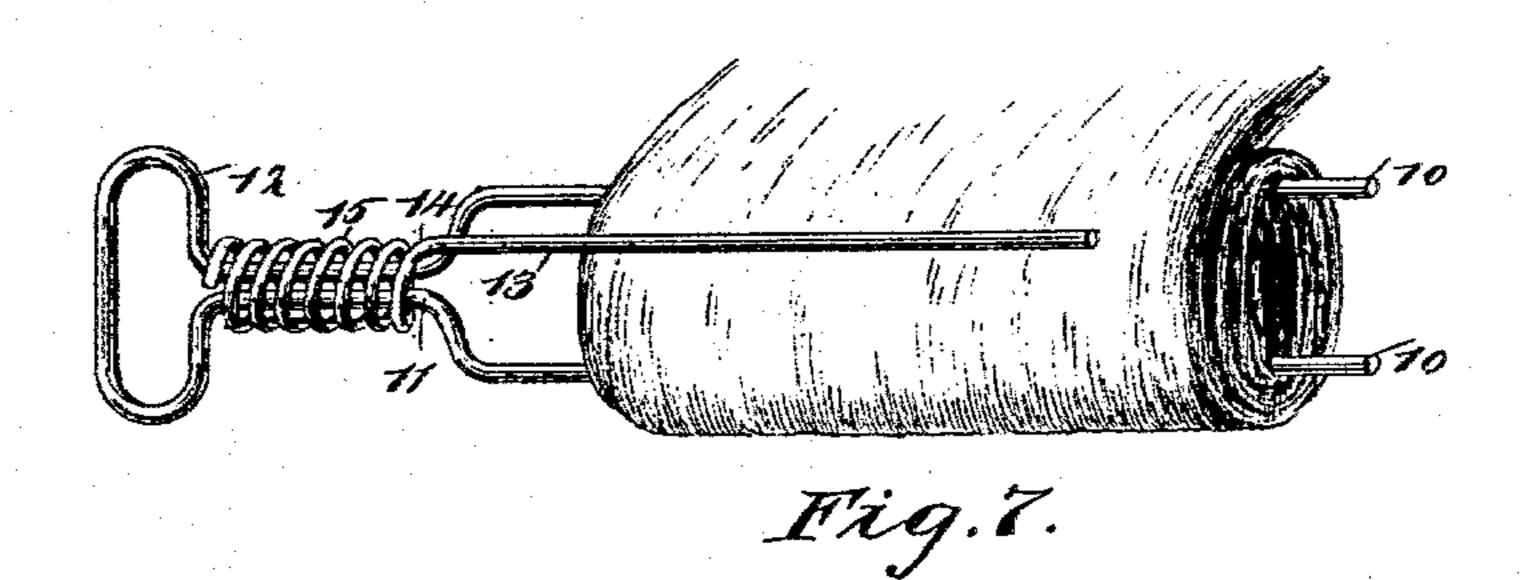
## E. DEUCHER. HAIR CURLER.

No. 515,998.

Patented Mar. 6, 1894.







WITNESSES: John alemnie Cohn alemnie E. Deucher

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ATTORNEYS.

## UNITED STATES PATENT OFFICE.

EUGENE DEUCHER, OF CLEVELAND, OHIO.

## HAIR-CURLER.

SPECIFICATION forming part of Letters Patent No. 515,998, dated March 6, 1894.

Application filed June 2, 1893. Serial No. 476, 348. (No model.)

To all whom it may concern:

Be it known that I, EUGENE DEUCHER, of Cleveland, in the county of Cuyahoga and State of Ohio, have invented a new and Improved Hair-Curler, of which the following is

a full, clear, and exact description.

My invention relates to improvements in hair curlers; and the object of my invention is to produce a very cheap and simple hair curler, which may be quickly and easily applied to the hair, may be as easily removed, may be left upon the hair for any desired length of time without inconvenience or discomfort, and which is adapted to make a very handsome curl.

To these ends my invention consists in certain features of construction and combinations of parts, as will be hereinafter described

and claimed.

Reference is to be had to the accompanying drawings forming a part of this specification, in which similar figures of reference indicate

corresponding parts in all the views.

Figure 1 is a side elevation of the curler embodying my invention. Fig. 2 is a longitudinal section of the same. Fig. 3 is a cross section on the line 3—3 in Fig. 1. Fig. 4 is an end view of the curler. Fig. 5 is a perspective view of a modification of the curler, showing particularly a modified form of lock to hold the curler in place upon the strand of hair and also to fasten the hair. Fig. 6 is a side elevation of a slightly modified form of the curler; and Fig. 7 is a perspective view, illustrating the application of the curler to a strand of hair.

The curler is provided with a spring fork having prongs 10, which may be made to lie parallel with each other but which normally 40 diverge so as to permit the easy insertion of a strand of hair between them, and these prongs are bent inward toward each other and formed into a reduced neck or shank 11, the members of which are expanded at one 45 end to form a thumb ring or handle 12 by which the fork may be turned. The springing apart of the fork members has also a tendency to create friction in the fork bearing to be described below, and when this friction is 50 slightly increased it serves to lock the fork in position so as to prevent the unwinding of the hair which is on it. The strands of hair

are adapted to be twisted upon the prongs of the fork, as hereinafter described, and they are held in place by a friction lock having a 55 finger 13 which is preferably of spring material and which lies substantially parallel with the prongs 10, but at a point opposite the center of the fork. The spring finger 13 is bent inward at one end, as shown at 14, and formed 60 into a spiral coil 15 which encircles the neck 11 of the fork and which thus forms a bearing for the fork and also a lock, as the forcing out of the finger by a strand of hair causes the coil to be tightened upon the fork of shank, so as to prevent the fork from turning and releasing the hair. One finger is all that is necessary, but it will be understood that more than one may be used if desired, and instead of forming the fastened end of the fin- 70 ger into a coil the finger may be struck up from the sheet metal and the fastened end of the finger may merge in a split sleeve 16, as shown in Fig. 5. In connection with such a sleeve a solid shank 17 is preferably employed 75 for the fork, and the shank is provided with notches 18 in which one edge of the sleeve may catch so as to lock the fork and finger in relation to each other.

Another modification of the curler is shown 80 in Fig. 6, in which the prongs 10 merge in a solid shank 19, which has a thumb ring 12 like that already described, and on the shank are washers 20 between which the bearing coil 15 and the spring locking finger 13 are held. 35 It will be understood that the form of the fork, its shank, and the connection with the spring finger may be changed in many ways without affecting the principle of my invention.

When the curler is applied to the hair, the strand of hair to be curled is placed between the prongs of the fork, the operator grasps the bearing 15 with one hand and with the other takes hold of the thumb ring 12 and twists 95 the fork, the neck of which turns in the bearing 15. This causes the strand of hair to be rolled upon the fork prongs and between the prongs and the spring finger 13, which, as the roll increases in size, is swungoutward slightly 100 thus tightening the coil 15 and the friction of the coil on the shank 11 prevents the fork from turning back and the roll of hair from loosening. When the curler is to be removed, it is

turned backward once or twice to loosen it somewhat, and it is then pulled outward lengthwise from the roll of hair, which then falls in a beautiful waving curl.

Having thus described my invention, I claim as new and desire to secure by Letters

Patent—

1. A hair curler comprising the fork and a finger 13, which projects alongside said fork and has a bearing that encircles the fork near its head, and is adapted to rotate thereon, substantially as shown and for the purpose described.

2. A hair curler comprising the spring fork having a reduced neck and a spring finger

which projects along side the fork and is formed at one end into a spring coil that encircles the fork neck and is adapted to revolve thereon as shown and described to operate as specified.

3. A hair curler, comprising a fork having 20 its prongs terminating at one end in a reduced neck which is provided with a thumb ring or handle, and a locking finger held substantially parallel with the prongs and provided with a terminal coil forming the bearing of 25 the fork neck, substantially as described.

EUGENE DEUCHER.

Witnesses:

C. F. BOEST, FRANCES M. SHARP.